CLAIMS AMENDMENTS

What is claimed is:

Claims 1-7 (canceled)

8. (previously amended)

A method for stabilizing and/or accumulating cellular RNA in vivo resulting in an increase in the total amount of cellular mRNA per cell as well as the protection of RNA from degradation during subsequent isolation procedures comprising:

1) preparing cell culture media depleted of phosphate
2) adding thiophosphate as the sole source of phosphate to the media
3) culturing cells in the modified media for a sufficient time such that most mRNAs and/or rRNAs are modified with phosphorothioate linkages

9. (currently amended)

A method for chemically labeling the RNA and/or DNA inside the cells of ~~complex~~ organisms comprising:

1) placing cells in direct contact with liquid media or bolus containing ~~modifying the source of phosphate by replacing it with thio-phosphate and/or by adding~~ an excess of thio-phosphate such that thiophosphate can effectively compete with the phosphate present for incorporation into cellular nucleotide pools ~~and then delivery of the thio-phosphate as either a solid or liquid feed source, or by direct injection of thiophosphate into the organism.~~

10. (previously amended)

A method to increase the accumulation of mRNAs and their respective proteins in micro-organisms during culture by preferentially stabilizing mRNAs with shorter than average half-lives relative to mRNAs with half-lives greater than average comprising:

1) preparing a series of ~~growing~~ microbial culture medias with different ratios of ~~cells~~ ~~in~~